DOCUMENT RESUME

ED 404 565 CE 073 627

AUTHOR Hardy, Marcelle
TITLE Strategic Experiments in Vocational Education and Training in Quebec.
PUB DATE Dec 96
NOTE 9p.; Roundtable presented at the Annual Meeting of the International Vocational Education and Training Association (Cincinnati, OH, December 5-8, 1996).
AVAILABLE FROM Departement des sciences de l'education, Universite du Quebec a Montreal, Case postale 8888, succursale Centre-Ville, Montreal, Quebec, Canada H3C 3P8 ($3 Canadian or $2 U.S.).
PUB TYPE Speeches/Conference Papers (150) -- Reports - Descriptive (141)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Academic Education; Articulation (Education); Career Choice; Career Education; *Cooperative Programs; *Education Work Relationship; Foreign Countries; *Institutional Cooperation; Policy Formation; Postsecondary Education; Program Development; Public Policy; *School Business Relationship; Secondary Education; *Vocational Education
IDENTIFIERS *Quebec

ABSTRACT

As a result of new legislation, experiments in school and workplace cooperation have been set up in Quebec in order to improve the relationship between the two entities and provide more vocational education options to youth. Five sections of recommendations are being implemented: (1) partnership protocol between an academic establishment and an enterprise in order to develop organizational models of training such as training periods, alternance training, and apprenticeship; (2) a path preparing students for semispecialized occupations, for students at least 16 years old who have completed Secondary II or Secondary III and who do not wish to pursue further education; (3) 1 year of career exploration for young people who have completed Secondary III and have no career projects; (4) new integrated secondary-college programs to provide continuity between vocational and technical education; and (5) access to vocational education programs after Secondary III, for students who have made a career choice and who want to begin vocational education. Impediments to implementing these approaches include the following: the difficulties of workplace cooperation, disparities in the working methods of teachers of academic education and vocational education, and problems in dialogue between high schools and colleges. Assessments of the experiments will start next year. (Contains 13 references.) (KC)

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ED 404 565

STRATEGIC EXPERIMENTS IN VOCATIONAL EDUCATION AND TRAINING IN QUEBEC

Marcelle Hardy

Round Table Presentation to the Grand Carousel into the International Vocational Education and Training Association (IVETA) meeting held in Cincinnati, Ohio December 5-8, 1996

DÉPARTEMENT DES SCIENCES DE L'ÉDUCATION
UNIVERSITÉ DU QUÉBEC À MONTRÉAL
Case postale 8888, Succursale Centre-Ville
Montréal, Québec
H3C 3P8

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STRATEGIC EXPERIMENTS IN VOCATIONAL EDUCATION AND TRAINING IN QUEBEC

Introduction

In Canada, education and training is of provincial jurisdiction. Therefore, I will cover exclusively education and vocational training released in the Province of Quebec where, as in United States, local organizations called School Boards benefit of a great autonomy. They have the initiative of implementing and managing experiences proposed by the Ministry of Education as well as the development of other experiences being discussed with the Ministry.

This presentation will concern especially high school level which takes care of training employees and skilled workers. To begin with, I describe the present organization of vocational education and training. Then, I will entertain you about new strategic cooperative experiences between school and the workplace.

I. Present organization of vocational education and training

The present organization of vocational education and training was implemented in 1987 following consultations between education and workplace representatives. It modifies nearly all the parameters of vocational high school since the conception of curriculum to the assessment and certification of the students. It is all planned in cooperation with industrial representatives dealing with each of the occupations taught (Ministry of Education, 1986; 1987).

More specifically, access conditions have been risen which means that the student must have succeeded his fourth or fifth high school (cf. figure 1). In another way, vocational education and training programs are made up exclusively of theoretical or practical vocational courses and the theoretical content of the vocational education has been enriched. Depending of the occupations, the program lasts from one and a half to two years of schooling and leads to a vocational diploma (DEP). Thereafter, the school offers specialization courses of one or two school terms. As an example, after a two-year machining technical course, the student may take a term of machining numerical control which gives him a certificate of vocational specialization (ASP) in numerical control, etc.

In all the vocational programs, the student goes through a period of training to get familiar with the industry when he begins his program. This one or two week training is devoted to see how the skills are performed in the workplace. During the last term of study, the student goes in industry through a period of integration training where during three of four weeks he tries to transfer the skills and knowledge acquired in school and begin his transition to the workplace.

Vocational teaching is centered on developing skills to think, to diagnose, to solve problems, to communicate, etc. in order to develop required competencies in the occupation chosen. The accent is put on solving-problem. The assessment of these skills is realized by a series of theoretical and practical tests conceived at local or provincial level. Student must succeed each exam with a minimal 80% mark which reads "Success" on his report card. In case of fail, the student is allowed to retake the test; if he fails again, he could retake the course that causes him problems.

The vocational education and training management is collegiate from the creation of programs to the assessment of students. Provincial sectorial committees exist for vocational education and training curriculum for each group of occupation. It rallies employer representatives, unions, if so, vocational teachers and the Ministry of Education representatives. The objectives of this group is especially the elaboration of vocational curriculum and regular revision of same. At the regional level, a similar working group rallies the representatives of all the occupations taught in the area.

At the local level, different types of relationship are progressively developed between workplace and schools dispensing vocational education and training. These initiatives are encouraged by governmental and employers groups. It can be done by: 1) participating to the final assessment of students; 2) freshening up period of training for teachers; 3) welcoming students for a period of training in industry; 4) temporary loan of equipment or donation of other equipment; etc.

2. Strategic cooperative experiences between school/workplace

Implementation of new experiments of school/workplace cooperation set up especially in 1995 and 1996, tend to make up for the diffeciencies observed following amendment applications already submitted and reply to new requests from the workplace. These are characterized by a better structured relationship and cooperation between school and workplace expressed within a law and new curriculum experimentation aiming to diversify the options to youth vocational education and training. We will submit successively changes coming from the Ministry of Employment and those developped by the Ministry of Education.

2.1 Experiments resulting from Employment

Concerning employment there has been the passage of a law and apprenticeship development. In 1993, the Government of Québec founded the Société québécoise de développement de la main-d'oeuvre (SQDM) [Quebec Society for the development of workforce] which relieves directly of the Ministry of Employment. With an office in each of the ten regions of the province, this Society supervises training in industry and training of people searching for employment or willing to re-integrate the workplace. SQDM is the only speaker facing the federal government with regard to vocational and technical education and training.

After many consultations with employers and their representatives, the government of Quebec passed, in June 1995, Act 90 favoring the development of workforce training (National Assembly, 1995; Québec, 1996). This Act foresees that the employer must invest the equivalent of at least 1% of his payroll in workforce training. This Act is in force since January lst, 1996 for enterprises with a payroll of one million Canadian dollars or more. By January 1st, 1998, the last enterprises affected by this Act are those with a payroll of $250,000. or more. With regard to the training of interns in the programs of the Ministry of Education, the employers can meet their obligations by: 1) preparing training of apprentices; 2) training supervisor of an apprentice or the guide of a teaching trainee in an enterprise ; 3) wages of a trainee's supervisor and of the guide of a teaching intern in an enterprise; 4) wages of a trainee from a recognized educational institution (SQDM; 1996, p. 4). We will follow the effects of this Act very closely during the coming years because it concerns all types of vocational and technical education and training in the workplace and in schools and colleges.

After consultation, the Quebec government publishes in 1992 a statement on apprenticeship orientations (Direction des politiques et des programmes de main-d'oeuvre et de formation professionnelle, 1992) [Administration of workforce and vocational education policies and programs]. After its founding in 1993, the SQDM in cooperation with the Ministry of Education have incorporated two apprenticeship programs: one in cookery for hotels and restaurant and the other in bakery. At the end of 1995, some 450 apprentices have been turned out. The apprentices are qualified in the skills where workforce is definitely insufficient. Their status is one of salaried, they are supervised by a mentor who received a training before being able to do so. The mentor has also on hand a detailed guide which specifies the type of training to be given in enterprise. Vocational schools complete the training of apprentices with theoretical courses. At the end of the education and training period, the apprentice can obtain a DEP equivalent to that obtained by students of other types of vocational programs. This experience, served as experiment, and allowed the SQDM and the Ministry of Education to set up an Apprenticeship System which became effective in 1996. It is an alternance training program (school-workplace) open to students who have completed their third high school. Approval of learning and the diploma delivered come from the Ministry of Education and are comparable to a vocational high school diploma. Apprenticeship programs will begin in the following occupations: repairing of recreational vehicles, mine working, machining production (mold production, die stamping, tooling, machining) etc. This experience is very promising but is liable to meet resistance. Incidentally, the General State Commission on Education (1996) specifies in their final report: "The difficulties encountered presently by schooling establishments as well as by high schools and colleges to find workplaces ready to accept their apprentices gives the thought that extending the Apprenticeship System will have limits" p. 24.

Act 90, already submitted, should facilitate the school-workplace cooperation by motivating employers to welcome and supervise Apprenticeship System trainees and those from vocational schools. It is also open to favor the cooperation with schools on many aspects, from the retraining of teachers to the modernization of vocational workshop equipment.

2.2 Experiences developed in Education

Concerning education since 1992, alternance training or cooperative education is more and more assumed into vocational education programs by School Boards (Henripin, 1994). Formalization and regulation of the experiments are clearly explained in a Reference Structure Report (Direction générale de la formation professionnelle et technique, 1995b) [General Administration of vocational education and training, 1995b] and an Organizational Structure Report (Direction générale de la formation professionnelle et technique, 1995a) [General Administration of vocational education and training, 1995a], these were distributed to all School Boards at the end of 1995. These aim to guide teachers and School administrations to develop a true school-workplace partnership to help the real integration of students' knowledge and skills within their study program. Alternance training is defined as:

> Alternance in vocational education and training is, at once, a pedagogical strategy and a method of organization of the education which combines,in a structured way, educative periods in school and periods of trainingin a workplace. This is all in relation to a vocational program leading to a diploma. (Direction générale de la formation professionnelle et technique, 1995b, p. 11).[General Administration of vocational education and training , 1995b].

Further to these experiences, the Ministry of Education has set up an Experimental program on different options offered to youths in vocational education (1995). This program

aims essentially to increase the number of young people in vocational education in high school. To attain this objective, the Ministry offers a variety of options in vocational education; some lead rapidly to the labour market while others allow to continue studies in vocational and technical education programs leading to high school diploma (DEP) or collegiate diploma (DEC).

The Ministry of Education urges institutions to offer, on an experimental basis, new vocational options answering the needs of local clientele. These options or measures require that each local academic organization develops the closest possible cooperation between school and the workplace. The school must serve the community yet be able to count on the assistance of local worplaces in offering new programs and new training formats.

In this context, alternance training or cooperative education and apprenticeship programs promote vocational and technical education. They make it possible to better adapt vocational education and training programs to the needs of the local workplaces and facilitate youth's school to work transition. The Ministry recommends these experimentations in five sections. Implementation started in September 1995 and should be assessed in June 1997. We submit them concisely:

Section 1: Partnership protocol between an academic establishment and an entreprise where they can identify the type as well as the conditions for implementing these partnerships. This protocol aims the development of organizational models of training, such as: training periods, alternance training and apprenticeship.

Section 2: Path preparing students for semi-specialized occupations. It is aimed at students at least 16 years old who have completed Secondary II or Secondary III and who have no interest in pursuing their education in the existing paths. These programs are developed by school boards in cooperation with local enterprises and meet local employment need. The program set up must provide for training in the workplace such as apprenticeship linked to pursuing academic education in language of instruction (French or English), second language and mathematics in high school. The duration of the program should not exceed one year. This path, started in September 1995, is experiencing great success with school boards who see it as a means to offer vocational education and training to a clientele who has special needs and facilitate school to work transition for these students.

Section 3: One year of career exploration for young people who have completed their Secondary III and have no career project. This experience is to favor youth get in touch with a variety of career options so that they may determine their preferences and interests with respect to various occupations and explore actual working conditions. This exploration may be part of the time necessary for optional subjects, Personal and social education courses and Career choice education and take place in vocational education centres and local workplaces.

Section 4: New integrated Secondary-College programs in order to better meet the need for continuity between vocational and technical education. Under this option, students may stay in an integrated program from Secondary III until the completion of their technical education (3rd Collegiate year). This is very close to the American TECH PREP formula. In the Quebec formula, this program is defined as:

> "A program where the academic and professional contents is relevant of high school education whereas the academic and technical contents is relevant of collegiate education. They become, from Secondary IV, an integrated overall which, after two or three years of studies or at the completion of the program, make it possible, with the appropriate diploma, to enter from the labour market as well as the pursue of higher

studies". (Direction générale de la formation professionnelle et technique, 1995c, p. 7).

The development and implementation of integrated programs require cooperation between the two teaching levels, secondary and collegiate, and a partnership with the workplace. This is why its implementation is realized very slowly. Many of these integrated projects have been submitted to the Ministry of Education and some are being actualized, such as: industrial electronic, aerospace, forestry, etc.

Section 5: Access to vocational education programs after Secondary III is aimed at students having made a career choice and who are eager to begin their vocational education. This type of program has the same academic and vocational requirements as the actual high school vocational diploma but it allows young people to begin their vocational education faster. The integration of academic and vocational education must be strong and involves developping teaching methods adapted to that type of clientele. Organization of vocational education must also favor the apprenticeship and the school to work transition in possible occupational sectors and develop partnership with local enterprises. The biggest challenge remains adapting academic education teaching to the specific needs of this clientele who is more interested with vocational education and practical activities (Direction générale de la formation professionnelle et technique, 1995d).

Conclusion

Experiments brought up in the Section on Employment or on Education have been made possible due to a cooperative structure between Ministries and representatives of the most important organisms representing education and the workplace. Cooperation at the policy and program levels as well as the efficient enforcement of Bill 90 investing income from the payroll for training purposes are essential for implementing experiments described above. Their success cannot however be assured because of many resistances which slow down the necessary transformations. These come from: 1) the will of workplace cooperation; 2) working methods of teachers of academic education and also teachers of vocational education; 3) dialogue between high schools and colleges. In other respects, these experiments bring hope to students and their parents and revive part of the teaching personnel enthusiasm. Implementation of these experiments is quite recent. Assessments will start next year so we will be able to appreciate their effects on the quality of youth's vocational education and training as well as on school-to-work transition.

References

Commission des États généraux sur l'Éducation. (1996). Les états généraux sur l'éducation 1995-1996. Rénover notre système d'éducation: dix chantiers prioritaires [General States on Education 1995-1996. Restore our education system: ten prioritized projects]. Québec: Gouvernement du Québec.

Direction générale de la formation professionnelle et technique. (1995). Programme expérimental de diversificarion des voies offertes aux jeunes en formation professionnelle [Experimental program for offering a greater variety of options to young people in vocational education]. Québec: Ministère de l'Éducation, Direction générale de la formation professionnelle.

Direction générale de la formation professionnelle et technique. (1995a). Cadre d'organisation d'une formation par alternance. [Organizational structure of alternance training]. Québec: Ministère de l'Éducation du Québec.

Direction générale de la formation professionnelle et technique. (1995b). L'alternance en formation professionnelle et technique: Cadre de référence. [Alternance training in vocational and technical education: Reference structure]. Québec: Ministère de l'Éducation du Québec.

Direction générale de la formation professionnelle et technique. (1995c). Programme expérimental de diversificarion des voies offertes aux jeunes en formation professionnelle. Volet 4 - Le développement de programmes intégrés secondaire-collégial [Experimental program for offering a greater variety of options to young people in vocational education. Option 4 - New integrated Secondary-College Programs]. Québec: Ministère de l'Éducation, Direction générale de la formation professionnelle.

Direction générale de la formation professionnelle et technique. (1995d). Programme expérimental de diversificarion des voies offertes aux jeunes en formation professionnelle. Volet 5 - L'accès au programne conduisant au DEP après la 3e secondaire [Experimental program for offering a greater variety of options to young people in vocational education. Option 5 - Access to programs leading to a DEP after Secondary III]. Québec: Ministère de l'Éducation, Direction générale de la formation professionnelle.

Direction des politiques et programmes de main-d'oeuvre et de formation professionnelle. (1992). Apprendre en travaillant: Énoncé d'orientations en matière d'apprentissage. [Learning while working: Orientation statement in apprenticeship]. Québec: Ministère de la Main-d'oeuvre, de la Sécurité du revenu et de la Formation professionnelle.

Henripin, M. (1994). Les pratiques locales du partenariat éducation-travail. In C. Landry & F. Serre (Eds.), École et entreprise: Vers quel partenariat?, (pp. 29-44). [School and workplace: Towards what kind of partnership?]. Sainte-Foy (Québec): Presses de l'Université du Québec.

Ministère de l'Éducation. (1986). La formation professionnelle au secondaire. Plan d'action. [Vocational education in high school. Action plan]. Québec: Gouvernement du Québec.

Ministère de l'Éducation. (1987). Cadre d'organisation de la formation professionnelle à l'école secondaire. [Organizational structure of vocational education in high school]. Québec: Gouvernement du Québec.

National Assembly. (1995). Bill 90: An Act to foster the development of manpower training. Québec: Québec Official Publisher.

Québec. (1996). Regulation respecting eligible training expenditures. Regulation respecting the determination of total payroll. Québec: Éditeur officiel du Québec.

Société québécoise de développement de la main-d'oeuvre. (1996). Fact Book. Act to foster the development of manpower training. Invest 1% in vocational training and reap the benefits. Montréal: Société québécoise de développement de la main-d'oeuvre.

Figure 1

Schooling Organization in Quebec